

CLAIMS

What is claimed is:

1. (Currently amended) A ~~sensor for sensing a dynamic state~~ sensing of a movable member ~~in a magnetically actuated motion control device~~, the magnetically actuated motion control device including a housing, said housing defining a cavity for receiving a movable member, said housing comprised of a magnetic field attracted material, in which the said movable member is located in said cavity, said movable member movable in said cavity relative to said housing, an electromagnetic coil, said electromagnetic coil generating a magnetic field to attract said housing magnetic field attracted material into contact with said movable member when supplied with a current to control motion of said movable member relative to said housing, the a sensor comprising:

 a first sensor member secured to the housing ~~of the magnetically actuated motion control device~~; and

 a second sensor member coupled to the movable member, wherein a relative position between the first sensor member and the second sensor member indicates the position of the movable member relative to the housing.

2. (Withdrawn) A system comprising:

 A) a washing machine including a housing and a drum, the drum being movable relative to the housing; and

 B) at least one magnetically actuated motion control device mounted between the drum and the housing, each at least one motion control device comprising a first member defining a cavity; a second member positionable within the cavity and being movable relative to the first member when positioned therein; at least one of the first and second members including one movable finger; and a magnetic field generator located on another of the first member and the second member, the magnetic field generator causing one of a portion of the first member and a portion of the second member to press against the other of the portion of the first member and the portion of the second member.

3. (Withdrawn) A system comprising:

A) a chair including a seat and a base, the seat being movable relative to the base; and

B) at least one magnetically actuated motion control device mounted between the seat and the base each at least one motion control device comprising a first member defining a cavity; a second member positionable within the cavity and being movable relative to the first member when positioned therein; at least one of the first and second members including one movable finger; and a magnetic field generator located on another of the first member and the second member, the magnetic field generator causing one of a portion of the first member and a portion of the second member to press against the other of the portion of the first member and the portion of the second member.

4. (Withdrawn) A system comprising:

A) a chair including a seat, at least one armrest and a base, the seat and at least one armrest being movable relative to the base; and

B) at least one magnetically actuated motion control device mounted between the at least one armrest seat and the base each at least one motion control device comprising a first member defining a cavity; a second member positionable within the cavity and being movable relative to the first member when positioned therein; at least one of the first and second members including one movable finger; and a magnetic field generator located on another of the first member and the second member, the magnetic field generator causing one of a portion of the first member and a portion of the second member to press against the other.

5. (Withdrawn) A system comprising:

A) a chair including a seat, at least one armrest, a backrest and a base, the seat and at least one armrest being movable relative to the base; and

B) at least one magnetically actuated motion control device mounted between the backrest seat and each of the at least one armrest, each of the at least one motion control device comprising a first member defining a cavity; a second member positionable within the cavity and being movable relative to the first member when

positioned therein; at least one of the first and second members including one movable finger; and a magnetic field generator located on another of the first member and the second member, the magnetic field generator causing one of a portion of the first member and a portion of the second member to press against the other.

6. (Withdrawn) A system, comprising:

A) a table having a top and a plurality of adjustable legs, each adjustable leg having a first portion and a second portion, the first portion being movable relative to the second portion; and

B) a magnetically actuated motion control device mounted between the first portion and the second portion of at least one of the adjustable legs, the motion control device comprising a first member defining a cavity; a second member positionable within the cavity and being movable relative to the first member when positioned therein; at least one of the first and second members including one movable finger; and a magnetic field generator located on another of the first member and the second member, the magnetic field generator causing one of a portion of the first member and a portion of the second member to press against the other.

7. (Withdrawn) A system comprising:

A) a first surface and a second surface, the first surface moveable relative to the second surface; and

B) a magnetically actuated motion control device mounted between the first surface and the second surface, the motion control device comprising a first member defining a cavity; a second member positionable within the cavity and being movable relative to the first member when positioned therein; at least one of the first and second members including one movable finger; and a magnetic field generator located on another of the first member and the second member, the magnetic field generator causing one of a portion of the first member and a portion of the second member to press against the other.

8. (Canceled)

9. (Canceled)

10. (Withdrawn) A system comprising:

- A) a housing including an opening;
- B) a ball located within the housing so that a portion of the ball protrudes through the opening in the housing, the ball being rotatable relative to the housing;
- C) a first shaft in rolling contact with the ball, the first shaft being coupled to a first magnetically actuated motion control device comprising a housing defining a cavity; a stator having a center axis and being positionable within the cavity, the stator and housing being relatively rotatable relative to the axis; the housing including one movable finger; and a magnetic field generator located on another of the housing and the stator, the magnetic field generator causing the finger to press against the stator; and
- D) a second shaft positioned substantially perpendicular to the first shaft, the second shaft being in rolling contact with the ball, the second shaft being coupled to a second magnetically actuated motion control device like said first magnetically actuated motion control device.

11. (Withdrawn) A system comprising:

- A) a container for holding an irregularly shaped object; and
- B) a plurality of magnetically actuated motion control devices, each magnetically actuated motion control device having a first end and second end, the first end of each magnetically actuated motion control device having an extension cap, the second end of each magnetically actuated motion control device being mounted to the container.

12. (Canceled)

13. (New) A device as claimed in claim 1 wherein said magnetic field attracted material is comprised of a steel.

14. (New) A device as claimed in claim 1 wherein said magnetic field attracted

material is comprised of an iron alloy.

15. (New) A device as claimed in claim 1 wherein said housing comprises a slotted housing.

16. (New) A device as claimed in claim 1 wherein said sensor comprises a potentiometer.

17. (New) A device as claimed in claim 1 wherein said sensor comprises a velocity sensor.

18. (New) A device as claimed in claim 1 wherein said sensor comprises an accelerometer.

19. (New) A device as claimed in claim 1 including a computer in electrical communication with the sensor.

20. (New) A device as claimed in claim 1 wherein said movable member comprises a piston.

21. (New) A device as claimed in claim 1 wherein said housing comprises a slotted tube.